

High Prevalence of Sexually Transmitted Infections in a Cohort of Men Who Have Sex with Men and Transgender Women From Port Elizabeth and Cape Town, South Africa



Ryan Zahn*, Karen Dominguez†, Travis Sanchez*, Nancy Phaswana-Mafuya‡§, Linda-Gail Bekker†, Stefan Baral#, Rachel Kearns*, Clarence Yah‡§, Patrick Sullivan*

*Department of Epidemiology, Emory University Rollins School of Public Health, †The Desmond Tutu HIV Centre, University of Cape Town, RSA, ‡Human Sciences Research Council (HSRC) of South Africa, § Nelson Mandela Metropolitan University, Port Elizabeth, South Africa, # Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health



AIDS 2016
DURBAN, SOUTH AFRICA
#AIDS2016 | @AIDS_CONFERENCE

Abstract Number: A-792-0224-07386

Background

There is little research describing sexually transmitted infection (STI) prevalence among men who have sex with men (MSM) and transgender women (transwomen) in Africa.

However, previous models suggest that an effective comprehensive HIV prevention strategy for this group requires diagnosing and treating STIs.

Methods

Sibanye Health Project

- One-year prospective study of a combination package of HIV prevention interventions
- MSM and transgender women from Port Elizabeth and Cape Town, South Africa
- Recruitment through outreach in community settings
- Baseline screening for HIV infection, syphilis, rectal and urethral gonorrhea and chlamydia
- Follow-up visits every 3-6 months with repeat HIV and STI screening
- Treatment provided for all with positive STI results; referral for HIV care

STI Prevalence Analysis

- Here, we describe overall STI prevalence by organism and site of infection (urethral/rectal) and stratified by age, city, and HIV status.
- Differences by race were evaluated with chi-squared tests.
- Trends by age were evaluated with the Cochran-Armitage test for trend.

Results

From February to September 2015, 292 MSM and transwomen enrolled, of whom 125 (43%) were living with HIV infection.

STI Prevalence - Baseline

- 124 participants (42%) had any type of STI.
 - ⇒ 34 (12%) had a urethral STI.
 - ⇒ 60 (31%) had a rectal STI (see Table).
- 57% (21/43) of participants 18-19 years had a rectal STI; significantly decreased with older age.
- Compared to HIV-negative persons, those living with HIV infection were more likely to have had syphilis ($p < .0001$) but less likely to have had urethral Chlamydia ($p < .01$).
- Of those with a biologically-confirmed STI, 8% (10/124) had a symptomatic STI diagnosis during the clinical assessment.

Conclusions

Biologically-confirmed STI prevalence is high in this cohort of MSM/transwomen from South Africa, particularly rectal STIs among the youngest groups.

The associations between STIs and HIV status may be due to differences in underlying sexual risk behaviors or previous screening/treatment.

A comprehensive HIV prevention strategy for MSM/transwomen should include a full set of STI screening - including rectal - and treatment when indicated.

These data further suggest that reliance on syndromic surveillance for STI would have missed more than 90% of these infections, highlighting the need for presumptive testing or even presumptive treatment for those at highest risk.

Sexually Transmitted Infections among Men Who Have Sex with Men and Transwomen, Sibanye Health Project, 2015

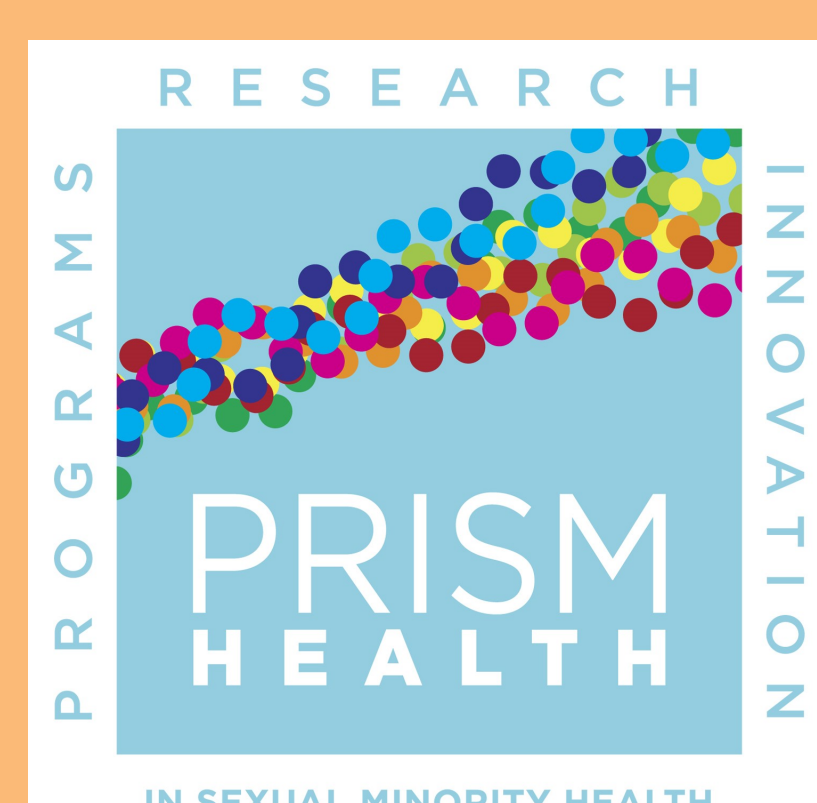
Site and Organism	Overall (N=292) n (%)	Age (years) ^a				City of residence ^b		HIV status ^b	
		18-19 (n=43) n (%)	20-24 (n=122) n (%)	25-29 (n=58) n (%)	30+ (n=69) n (%)	Cape Town (n=115) n (%)	Port Elizabeth (n=177) n (%)	Positive (n=125) n (%)	Negative (n=167) n (%)
Any site, any organism	124 (42%)	26 (60%)	47 (39%)	25 (43%)	26 (38%)	58 (50%)	66 (37%)	61 (49%)	63 (38%)
Urethral ^c , any organism (N=288)	34 (12%)	4 (9%)	13 (11%)	12 (21%)	5 (7%)	15 (13%)	19 (11%)	7 (6%)	27 (16%)
Urethral gonorrhea	8 (3%)	2 (5%)	4 (3%)	2 (4%)	0 (0%)	6 (5%)	2 (1%)	2 (2%)	6 (4%)
Urethral Chlamydia	29 (10%)	2 (5%)	11 (9%)	11 (19%)	5 (7%)	11 (10%)	18 (11%)	5 (4%)	24 (15%)
Rectal ^c , any organism (N=194)	60 (31%)	21 (57%)	25 (34%)	5 (15%)	9 (18%)	37 (34%)	23 (27%)	31 (37%)	29 (26%)
Rectal gonorrhea	30 (16%)	7 (19%)	17 (23%)	2 (6%)	4 (8%)	20 (19%)	10 (12%)	16 (19%)	14 (13%)
Rectal Chlamydia	47 (24%)	20 (54%)	17 (23%)	5 (15%)	5 (10%)	28 (26%)	19 (23%)	25 (30%)	22 (21%)
Syphilis ^c (N=286)	50 (18%)	4 (10%)	17 (14%)	14 (24%)	15 (22%)	19 (17%)	31 (18%)	34 (28%)	16 (10%)

a Bold denotes significant difference at $p < 0.05$ on Cochran-Armitage test for trend.

b Bold denotes significant difference at $p < 0.05$ on Chi-square test.

c Not all participants provided all specimens needed for screening.

This research was funded by grants from the National Institutes of Health (5R01AI094575 and P30AI050409) and the US Centers for Disease Control and Prevention.



Contact Us At:

Ryan Zahn

Emory University
1518 Clifton Rd, NE
Atlanta, GA, USA 30322

Office +1-404-712-0123
rzahn@emory.edu